

IN THE CLAIMS:

Claims 1-9. (Withdrawn)

10. (Currently Amended) A method for making wallboard, comprising:
combining at least fly ash, water and at least a first binder to provide a composition
having a viscosity, said fly ash being in the range of about 60%-66% by weight, said water
being in the range of about 31%-37% by weight and said at least first binder being in the
range of about 1.8%-2.4% by weight;

joining first and second members to upper and lower portions of said composition
when said viscosity is at least about 600,000 centipoise; and
completing said wallboard after said joining step.

11. (Original) A method, as claimed in Claim 10, wherein:

said at least first binder is part of a binder solution that includes at least portions of
said water and remaining portions of said water being part of a foamable substance and in
which said foamable substance includes a second binder that is one of: compatible with and
equivalent to said first binder.

12. (Original) A method, as claimed in Claim 11, wherein:

each of said first binder and said second binder is different from polyvinyl acetate and
includes polyvinyl alcohol.

13. (Original) A method, as claimed in Claim 10, wherein:

at least portions of said at least first binder are part of a binder solution with first
portions of said water and remaining portions of said at least first binder are part of a
foamable solution with second portions of said water and said combining step includes
introducing separately each of said fly ash, said binder solution and said foamable solution
to a mixer.

14. (Original) A method, as claimed in Claim 10, wherein:
said joining step includes locating said first member on a conveyor and receiving
portions of said composition in a slurry on said first member and subsequently locating said
second member on said portions of said composition.

15. (Original) A method, as claimed in Claim 10, wherein:
said combining step includes monitoring viscosity of said composition output from
a mixer.

16. (Original) A method, as claimed in Claim 10, wherein:
said combining step includes controlling using a control system at least one of a first
pump mechanism and a first valve device in communication with at least a first vessel
containing at least some of said at least first binder.

17. (Original) A method, as claimed in Claim 16, wherein:
said combining step includes outputting a desired amount of said fly ash from a
second vessel containing at least said fly ash using said control system.

18. (Original) A method, as claimed in Claim 17, wherein:
said combining step includes regulating production of a foamable substance that
includes at least some of said water using said control system and at least one of a second
valve device and a second pump mechanism.

19. (Currently Amended) A method, as claimed in claim 10, wherein for making
wallboard, comprising:
combining at least fly ash, water and at least a first binder to provide a composition
having a viscosity;

joining first and second members to upper and lower portions of said composition
when said viscosity is at least about 600,000 centipoise; and

completing said wallboard after said joining step, said completing step includes preheating said composition and said first and second members and in which, during said preheating step, said composition expands.

20. (Original) A method, as claimed in Claim 19, wherein:

said completing step includes heating said composition and said first and second members after said preheating step and in which any expansion of said composition during said heating step is less than said expansion during said preheating step.

21. (Currently Amended) A method, as claimed in Claim 10, wherein for making wallboard, comprising:

combining at least fly ash, water and at least a first binder to provide a composition having a viscosity;

5 joining first and second members to upper and lower portions of said composition when said viscosity is at least about 600,000 centipoise; and

10 completing said wallboard after said joining step, said completing step includes preheating said composition and said first and second members and in which, during said preheating step, said composition has bubbles and in which at least a majority of said bubbles have a thickness that enable them to maintain holding air during said preheating step.

22. (Original) A method, as claimed in Claim 10, wherein:

after said completing step, said composition is essentially homogenous in that, for each cross-section thereof, an area of .1 square inch is essentially the same as any other area of .1 square inch.

23. (Original) A method, as claimed in Claim 10, wherein:

said combining step includes introducing fibers to said composition in an amount less than 1% by weight.

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24. (Canceled)

25. (New) A method for making wallboard, comprising:
combining at least fly ash in the range of about 60%-66% by weight, water in the
range of about 31%-37% by weight and at least a first binder in the range of about 1.8%-
2.4% by weight to provide a composition having a viscosity;
joining first and second members to upper and lower portions of said composition;
and
completing said wallboard after said joining step.

26. (New) A method for making wallboard, comprising:
combining at least fly ash, water and at least a first binder to provide a composition
having a viscosity;
joining first and second members to upper and lower portions of said composition;
and
completing said wallboard after said joining step, wherein said composition is heated
and during said heating, said composition expands.

27. (New) A method for making wallboard, comprising:
combining at least fly ash, water and at least first portions of a first binder in
providing a composition having a viscosity;
monitoring said viscosity of said composition;
controlling based on said monitored viscosity at least one of a first pump mechanism
and a first valve device in communication with at least a first vessel containing at least
second portions of said at least first binder before said at least second portions are combined
with at least said fly ash;
joining first and second members to upper and lower portions of said composition;
and
completing said wallboard after said joining step.

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28. (New) A method, as claimed in Claim 27, wherein:

said controlling step includes using a control system to control said at least one of
said first pump mechanism and said first valve device.
